



GCSE MARKING SCHEME

SUMMER 2019

PHYSICAL EDUCATION - UNIT 1 (FULL COURSE)
3550U10-1

INTRODUCTION

This marking scheme was used by WJEC for the 2019 examination. It was finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conference was held shortly after the paper was taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conference, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about this marking scheme.

GCSE PHYSICAL EDUCATION - UNIT 1 FULL (COURSE)

SUMMER 2019 MARK SCHEME

Question		AO1	AO2	AO3	Total
1. (a)	In the DVD Jade Jones performs a variety of different kicks.	1			1
(i)	Identify the main component of fitness needed to execute the high kicks seen in the clip. Flexibility 1x1 mark				
(ii)	Identify the appropriate test that measures the component of fitness named in Q1. (a). • sit and reach 1x1 mark	1			1
(iii)	Analyse the muscles involved in a kick as seen in the DVD, by matching the correct muscle to the appropriate letter. A - Quadriceps B - Biceps C – Gluteus-maximus/Gluteals No abbreviations 3x1 mark			3	3

Question		AO1	AO2	AO3	Total
(b) (i)	Explain why it would be important to warm up before performing a high kick, as seen in the clip. Award one mark for: • Increase elasticity/flexibility • Increase Range of Movement (ROM) Award two marks for the amplification: • Reduces the risk of injury • Prepares the body for the skill they are about to do 2x1 mark		2		2
(ii)	Explain why it is important for the athlete to be mentally prepared for the competition. Award a maximum of two marks for: • Focus • Confidence • Motivation • Arousal • Anxiety Award an additional two marks for amplification related to the competition: e.g. • Increase confidence to help them compete at their highest level. • Provides motivation for the task in hand allowing you to cope with adversity. • Focuses the mind on execution to finalise and commit to your game plan or strategy. • Regulates arousal and anxiety levels, therefore optimising performance. 2x2 mark		4		4

Question		AO1	AO2	AO3	Total
(iii)	Explain why a cool-down would benefit an athlete after competition. Award one mark for: - Reduces recovery time/return body to pre-competition levels Award additional mark for the amplification: - Gradually cool body temperature - Return muscles to their optimal length-tension relationships - Prevent venous pooling of blood in the lower extremities - Remove waste product - Replenish nutrients/hydration levels - Reduce effects of DOMS - Repay oxygen debt Award a maximum of one mark for two amplifications		2		2
(c) (i)	Explain the effect of one short term response of exercise on the body. Award one mark for short term response: - Increase heart rate - Increase stroke volume - Increase tidal volume - Increase respiratory rate - Increase temperature - Sweating/redness - Increase blood to working muscles Accept any other valid short term responses. Award additional mark for effect: - Increase oxygen - increase nutrients - Increase in neural functioning - Cooling of body temperature - Muscular elasticity		2		2

Question		AO1	AO2	AO3	Total
(ii)	Assess how the long term adaptations to the heart, enables individuals to follow an active healthy lifestyle. 2x1 marks • Prevent heart disease • To be able to exercise without undue fatigue • To recover quicker • Be able to exercise without risk of health problems • Live longer No marks awarded for identification of adaptation.			2	2

Question		AO1	AO2	AO3	Total
2. (a) (i)	Outline two reasons why some children are missing out on opportunities to develop physical literacy in their early childhood. • Help/support • Lack of inspiration • Lack of motivation • Lack of role models 2x1 mark	2			2
(ii)	Describe the impact that not taking part in regular physical exercise might have on the young individual seen in the clip. Marks from: • Physical • Mental • Social e.g. • Reduced confidence in social situations • Unable to accomplish basic daily tasks • Meeting people • Making friends • Fitness • Gain weight • Reduction in concentration levels • Go on to lead a sedentary lifestyle due to habit 3x1 mark	3			3
(b)	Describe how you could use extrinsic motivation to encourage a young person to follow an active, healthy lifestyle. • Give praise / encouragement • Badges (tangible) rewards • Give opportunity to join a team / club • Health / fitness benefits • Show others as role models • Show positive benefits for body image / to look good • To make friends / do as friends do 3x1 marks	3			3

Question		AO1	AO2	AO3	Total
(c)	Identify three variables that could affect the classification of skill within physical activity. • Environment e.g weather, crowd, opponents • Complexity • Pace No marks for classification e.g. open/closed 3x1 marks	3			3
(d)	Teaching a new skill can be put on a basic/complex continuum.  (i) Justify why the arrow has been placed at this point on the continuum when teaching a young individual. Basic skills are straight forward skills with few subroutines requiring little concentration and cognitive activity on the part of the performer, for example, walking or running. If a skill is too difficult for a young child, they might give up or lose enjoyment and/or motivation Complex skills are complicated skills requiring a lot of attention or practice- young children usually don't have a large attention span. Complex skills require a large number of (interlinked) subroutines, some of which may be habitual and learned, which affects the ease with which the performer performs the skill. For example, a gymnastic floor exercise. At a young stage, these subroutines might not have been learned well enough yet. 1x1 mark for basic justification 1x1 mark for developed answer with justification Two marks can be awarded for basic or complex skills.		2		2

Question		AO1	AO2	AO3	Total
(ii)	Identify a skill of your choice and place it on the internally/externally paced continuum. Skill... Internally paced ←————→ Externally paced 1x1 mark for correctly labelling continuum Justify your answer. Skills range according to who controls the speed of the environment. Self-paced skills (internal) are controlled by the performer. The performer decides on when to execute the skill, such as in athletics, when throwing the javelin, or in gymnastics when vaulting. These skills tend to be more towards the closed end of the environmental continuum. A 100 m sprinter has total control over the rate at which they run and the timing of their own action. Externally paced skills are controlled by the environment. They include a decision and a reaction. In most cases the opponent controls the rate of performance. For example, in football the defender closes down the center forward, and this causes a decision to be made of either shooting or passing. These skills therefore tend to be towards the open end of the environmental continuum. A goalkeeper in handball will jump high and left because they perceive that the ball has been thrown in that direction and for no other reason. Therefore, the goalkeeper is responding to their environment rather than choosing for themselves how to perform the skill. 1x1 mark for justification		2		2

Question		AO1	AO2	AO3	Total
(e)	Compare the characteristics of a skilled performer to that of an unskilled performer. Skilled performer: Technical Consistent Accurate Efficient Effective Confident Control Aesthetically pleasing Maximum two marks for a list – no examples 4x1 marks for identifying 4 characteristics with examples 2x2 marks for amplification if compared through examples		4		4

Question		AO1	AO2	AO3	Total						
3. (a) (i)	Identify the classification of lever seen at point A and point B in the image above <table border="1"><tr><td></td><td>Classification of lever</td></tr><tr><td>A</td><td>1</td></tr><tr><td>B</td><td>3</td></tr></table>		Classification of lever	A	1	B	3	2			2
	Classification of lever										
A	1										
B	3										
(ii)	Assess the difference between the two classification of levers. (AO3 2 marks) 1. First class lever – the fulcrum is in the middle of the effort and the load. (EFL) 2. Third class lever – the effort is in the middle between the fulcrum and the load. (FEL) F- Fulcrum/pivot E – Effort/Force L – Load/resistance/weight Appropriate diagram would be accepted			2	2						
(b) (i)	Identify the main energy system when cycling at moderate intensity for a long period of time. <table border="1"><tr><td></td><td>Tick one box only</td></tr><tr><td>Aerobic</td><td>✓</td></tr><tr><td>Anaerobic</td><td></td></tr></table>		Tick one box only	Aerobic	✓	Anaerobic		1			1
	Tick one box only										
Aerobic	✓										
Anaerobic											
(b) (ii)	Describe when a cyclist would use the anaerobic energy system. • Increase in intensity • Any acceleration Reference to intensity needed in the answer. For example: 1) Going up a steep hill 2) Accelerating to finish a race 2x1 mark	2			2						

Question		AO1	AO2	AO3	Total
(c)	Elite cyclists follow a structured training programme to develop exceptional levels of fitness. Using the data from the graph above, analyse the effects of training on the cyclist. Max 3 marks without using data 3x1 mark • <u>Trained/untrained athletes 'can exercise for':</u> • <u>periods of time/duration</u> • <u>lactic acid/intensity 'at the same or higher than'</u> Award maximum of three marks if there is no reference to the data. 1x1 mark for use of data		4		4
(d)	Elite cyclists dedicate years of their life to prepare physiologically and psychologically for their event. Evaluate two possible mental preparation techniques a cyclist might use prior to a race. Indicative content - Imagery - Cycling the route/map but using more than one sense - Visualisation - Seeing the race in your mind - Outcome e.g. lifting the trophy, winning the race - Mental rehearsal - Process e.g. component parts - To include a description of the above and example. Impact of techniques - Confidence - Control - Challenge - Commitment - Arousal - Anxiety - Motivation - Performance. (See band sheet)	2		4	6

3 d.	Evaluate two possible mental preparation techniques a cyclist might use prior to a race. (6)	
Band	AO1	AO3
	2 marks	4 marks
3	No marks are available in Band 3 for AO1.	4 marks Excellent, well-reasoned evaluation of two possible mental preparation techniques a cyclist might use prior to a race. Explicit links between the impact of mental preparation on performance. The answer is balanced and detailed and focuses on the key content.
2	2 marks Good knowledge of the possible mental preparation techniques a cyclist might use prior to a race.	2-3 marks Good well-reasoned evaluation of the possible mental preparation techniques a cyclist might use prior to a race. Clear links between the impact of mental preparation on performance. The answer has some detail and focuses on some areas of content.
1	1 mark Limited knowledge of one possible mental preparation techniques a cyclist might use prior to a race.	1 mark Limited evaluation of the possible mental preparation techniques a cyclist might use prior to a race. The answer has some limited detail and focuses on some areas of content.
0	0 marks No knowledge of the possible mental preparation techniques a cyclist might use prior to a race.	0 marks Not attempted. No analysis.

Question		AO1	AO2	AO3	Total
(e) (i)	One negative impact of commercialisation in cycling is the increase in deviance. Identify one example of deviance in sport. For example: - cheating • Drug taking • Cheating • Breaking rules • Violence within performance • Match fixing Not hooliganism Any other relevant example should be credited. 1x1 mark.	1			1
(ii)	Identify two positive impacts of the increase in commercialisation in sports. Award two marks for any two valid responses related to: Performance, spectators, officiating, coaching and participation. 2x1 mark	2			2

Question		AO1	AO2	AO3	Total
(f)	'Performance enhancing drugs should be legalised in sport.' Discuss. (AO1 2 marks, AO3 4 marks) 6 marks • Positive and negatives discussion about the merits of taking performance enhancing drugs. • Physical, moral, psychological, social implications. Indicative content: • Cheating – integrity • Gamesmanship • True spirit • Unfair advantage/fairness • Unlevel playing advantage • Role models • Health • Safety/health • Sportsmanship • Regulated • Exciting/higher records • Respect and passion • Improvement in standards • Give sport a bad name • Performance (see separate levels sheet)	2		4	6

3 f.	'Performance enhancing drugs should be legalised in sport.' Discuss. (6)	
Band	AO1	AO3
	2 marks	4 marks
3	No marks are available in Band 3 for AO1.	4 marks Excellent, well-reasoned discussion of why performance enhancing drugs should be legalised in sport. The answer is balanced and detailed and focuses on the key content.
2	2 marks Good knowledge of why performance enhancing drugs should be legalised in sport.	3 marks Good well-reasoned discussion of why performance enhancing drugs should be legalised in sport. The answer has some detail and focuses on areas of content.
1	1 mark Limited knowledge of why performance enhancing drugs should be legalised in sport.	1-2 marks Limited discussion of why performance enhancing drugs should be legalised in sport. The answer has limited detail and focuses on some areas of content.
0	0 marks No knowledge of why performance enhancing drugs should be legalised in sport.	0 marks Not attempted. No analysis.

Question		AO1	AO2	AO3	Total
4. (a)	Complete the info process model for a netball player by placing the following terms into the correct boxes <pre> graph TD 1[1] --> C[] 2[2] --> C C --> 3[3] C --> 4[4] </pre> 1-input 2-decision making 3-output 4-feedback 4x1 mark	4			4
(b)	Using sporting examples, explain why feedback is important when learning a new skill. Award a maximum of two marks for effects of feedback • motivates you to try harder • reinforces good performance • it helps you to improve • realise your errors • increases confidence • increases adherence levels Award a maximum of two marks for sporting example 2x2 marks		4		4
(c)	One initiative to increase participation and motivation in females is walking Netball. Assess why walking netball could be a suitable activity for a sedentary individual. • Fun • Low impact • Less competitive • Social • Motivation • Adherence • Sports Pyramid • Lower level of fitness required • Health and wellbeing • Improve fitness	2		4	6

4 c.	Assess why walking netball could be a suitable activity for a sedentary individual. (6)	
Band	AO1	AO3
	2 marks	4 marks
3	No marks are available in Band 3 for AO1.	4 marks Excellent, well-reasoned evaluation of why walking netball could be a suitable activity for a sedentary individual. Explicit links between the impact of walking netball on the sedentary individual. The answer is balanced and detailed and focuses on the key content.
2	2 marks Good knowledge of the possible effects of walking netball on the sedentary individual.	2-3 marks Good well-reasoned evaluation of why walking netball could be a suitable activity for a sedentary individual. Clear links between the impact of walking netball on the sedentary individual. The answer has some detail and focuses on some areas of content.
1	1 mark Limited knowledge of the effects of walking netball on the sedentary individual.	1 mark Limited evaluation of why walking netball could be a suitable activity for a sedentary individual. The answer has some limited detail and focuses on some areas of content.
0	0 marks No knowledge of the possible effects of walking netball on the sedentary individual.	0 marks Not attempted. No analysis.

Question		AO1	AO2	AO3	Total
(d)	Explain why goal setting can help to develop an individual's self-confidence to follow an active lifestyle Components of SMART are linked to confidence, e.g: • Ensuring / giving / enabling success • Recognising progress / progress made obvious / measurable / recorded • Encouraging and exciting • Gives evidence of faster / stronger / fitter • Motivating • Control over what happens • Identifying challenges • Gives more time • Adherence 0 marks awarded for just a list of SMART targets.		2		2
(e)	Analyse using appropriate examples, how technology might be used as a motivational tool for non-elite athletes. • Helps to monitor fitness/shows progress • Engagement with activity • Could give a placebo effect to athletes- giving them a mental edge over opponents • By being part of a social group/comparison e.g Strava lets you 'check out' where you stand compared to others e.g. 'King of the Mountain' (KOM) • Use of equipment improve Self-confidence • Adherence 2x2 marks			4	4

Question		AO1	AO2	AO3	Total								
5. (a)	Identify the movement A, B, C in the above picture <table><tr><td></td><td>Movement pattern</td></tr><tr><td>A</td><td>Flexion</td></tr><tr><td>B</td><td>Extension</td></tr><tr><td>C</td><td>Adduction/Abduction/Rotation</td></tr></table>		Movement pattern	A	Flexion	B	Extension	C	Adduction/Abduction/Rotation	3			3
	Movement pattern												
A	Flexion												
B	Extension												
C	Adduction/Abduction/Rotation												
(b)	Using the principles of training evaluate how a player like Jonathan Davies could improve their performance Candidates must use the principals of training and SPOV S – Specificity. The relevance of the training to the component, training, individual and the activity. P – Progression. Getting progressively more difficult in terms of the overload. O – Overload. Frequency, intensity and duration. V – Variance. Change in training to maintain motivation and interest. Bands below	2		4	6								

5 b.	Using the principles of training evaluate how a player like Jonathan Davies could improve their performance. (6)	
Band	AO1	AO3
	2 marks	4 marks
3	No marks are available in Band 3 for AO1.	4 marks Excellent, well-reasoned evaluation of the use of training principles to improve performance. SPOV used explicitly, with appropriate examples. Explicit links between the impact of how training principles can be used to improve performance. The answer is balanced and detailed and focuses on the key content.
2	2 marks Good knowledge of the use of training principles to improve performance.	2-3 marks Good well-reasoned evaluation of the use of training principles to improve performance. SPOV used, with some appropriate examples. Clear links between the impact of how training principles can be used to improve performance. The answer has some detail and focuses on some areas of content.
1	1 mark Limited knowledge of the use of training principles to improve performance.	1 marks Limited evaluation of the use of training principles to improve performance. SPOV used, with limited examples. The answer has some limited detail and focuses on some areas of content.
0	0 marks No knowledge of the use of training principles to improve performance.	0 marks Not attempted. No analysis.

Question		AO1	AO2	AO3	Total										
(c)	If Jonathon Davies was running in a straight line towards the try line, identify in which plane of movement would he be travelling. <table border="1"><thead><tr><th>Plane of movement</th><th>Tick one box only</th></tr></thead><tbody><tr><td>Sagittal</td><td>✓</td></tr><tr><td>Frontal</td><td></td></tr><tr><td>Transverse</td><td></td></tr><tr><td>Vertical</td><td></td></tr></tbody></table>	Plane of movement	Tick one box only	Sagittal	✓	Frontal		Transverse		Vertical		1			1
Plane of movement	Tick one box only														
Sagittal	✓														
Frontal															
Transverse															
Vertical															
(d)	Using practical examples, explain why speed and strength are important components of fitness in a team game. (speed) Have good reactions/be able to respond quickly or to be able to run/move fast to catch someone or to chase after ball, opposition. (strength) To be able to lift or carry effectively or to be able to overpower an opponent or to be able to support your body weight well. Competing against the opposing team in the ruck with greater force/resistance. 2x 2 marks No marks awarded for definition alone, without an example. 1 mark for basic examples. 2 marks for detailed examples Two marks can only be awarded if the example is not in relation to team games.		4		4										
(e) (i)	Identify the recognised tests that measure: 1. Speed – 30/50 metre sprint test 2. Strength – 1 rep max (RM)/hand grip	2			2										

Question		AO1	AO2	AO3	Total
(e) (ii)	Explain why fitness tests need to have validity and reliability. • Validity: Fitness tests must measure the component of fitness that they are supposed to. • Reliability: A reliable test produces the same results if repeated. The question does not ask for definitions but are also acceptable in the correct response: • Accuracy combination of both • Comparisons Award maximum one mark for each. 2x1 marks		2		2